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DECONSTRUCTING INEQUALITY: CUMULATIVE IMPACTS, ENVIRONMENTAL JUSTICE, AND INTERSTATE REDEVELOPMENT

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ABSTRACT

The siting and development of Interstate 81 in Syracuse, New York, similar to highway projects across the nation, lead to the displacement of Black Syracusans and has exposed thousands of remaining residents at heightened environmental harm. As the interstate is slated to be redeveloped due to age and safety issues, national attention has focused on the highway as a potential exemplar for similar projects across the United States. Federal law mandates that environmental impact analysis be conducted, and due to the prevalence of marginalized populations, environmental justice impacts are a critical feature in this assessment. This article evaluates both the redevelopment of the interstate through an assessment of a 10,000+ page draft environmental impact statement, review of relevant policy documents and attendance at public meetings to assess the potential for environmentally sustainability and just outcomes. It concludes that, along with similar redevelopment projects from online due to the nation’s aging infrastructure, environmental analysis and planning must employ restorative justice frameworks to strengthen and heal communities impacted from the legacy of racist urban planning.

INTRODUCTION

Syracuse, New York, has long been an epicenter of socioeconomic and environmental inequality, emblematic of the post-industrial American Rust Belt and beyond. As a 1.4-mile stretch of Interstate 81 (“I-81”) within the city is set to be demolished, Syracuse must contend with a long legacy of racial and environmental injustice. This reckoning will happen amid contemporary economic inequality and the concomitant environmental and social instability that has amplified racial segregation in the city. These events also occur as redevelopment claims, which address historic displacement, poverty, and unemployment, are enacted. With similar transportation infrastructure projects on the horizon across the United States, I-81’s redevelopment can shape environmental and socioeconomic conditions for the region in the decades ahead and also be a harbinger for forthcoming projects across the nation.

This article appraises the potential for environmental justice (“EJ”) through its evaluation of a 10,000+ page draft environmental impact statement (“DEIS”). The analysis also examines nearly century-old planning documents, featured engagement with local and state planning officials, and attendance at and participation in community meetings and public hearings. Federal mandates necessitate cumulative impacts analysis to assess the
imprint of large projects on EJ communities, a similar methodology is used here to evaluate state and federal redevelopment efforts related to the project.

The analysis uses cumulative impact analysis and an EJ framework to evaluate the redevelopment of the I-81 viaduct and highway redevelopment. In analyzing redevelopment, this case required isolating singular projects related to transportation planning, from concurrent and overlapping environmental and socioeconomic conditions to achieve a deep understanding of the burdens that communities face in totality. Thus, the cumulative approach is necessary here and works in concert with the EJ framing, which is employed to examine how marginalized communities face heightened vulnerability as a result of being overburdened by compounding impacts. I-81's siting through Black Syracuse demands an evaluation of current conditions and redevelopment not as singular events, but rather as part of broader trends that perpetuate environmental racism and inequality and that manifest in “sacrifice zones.” In the case of Syracuse, not only was a community dissected, displacing hundreds of Black families in the process, but also exposed thousands of remaining families to environmental harm.

Section I provides an overview of environmental justice. Section II contextualizes EJ claims within the context of Syracuse. Section III illuminates the methodological approach of the research. Section IV takes the methodology and frames it within the need to engage in cumulative environmental impacts analysis to fully apprehend the risks that redevelopment projects can pose for communities. Section V employs the cumulative impacts analysis framing by examining an assortment of environmental impacts that comprehensive urban redevelopment analysis mandates. Ultimately this analysis

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1. This paper frames environmental justice communities as those neighborhoods with higher concentrations of residents of color and low-income households than the city and region as a whole. The analysis centers these communities due to decades of research which has revealed troubling relationships between race, income and environmental inequality. See generally COMM’N FOR RACIAL JUST., TOXIC WASTES AND RACE IN THE UNITED STATES: A NATIONAL REPORT ON THE RACIAL AND SOCIO-ECONOMIC CHARACTERISTICS OF COMMUNITIES WITH HAZARDOUS WASTE SITES xiii (1987); RACHEL MASSEY, ENVIRONMENTAL JUSTICE: INCOME, RACE, AND HEALTH i (2004); Robert D. Bullard, et al., Toxic Wastes and Race at Twenty: Why Race Still Matters After All of These Years, 38 ENV’T L. 371, 371 (2008); Lemir Teron, et al., Establishing a Toxics Mobility Inventory for Climate Change and Pollution, 12 SUSTAINABILITY: J. OF RECORD 226, 226 (2019).

2. A viaduct is an elevated road. The raised section of I-81 in Syracuse is commonly referred to as such.


4. The installation of the I-81 wasn’t the first racialized displacement of African Americans in Syracuse; Animashaun Ducre sites the removal of Blacks in the mid-1930s in the Washington-Water Strip community in a city-backed slum clearance, scheme. K. ANIMASHAUN DUCRE, A PLACE WE CALL HOME: GENDER, RACE, & JUSTICE IN SYRACUSE 28 (Syracuse Univ. Press 2012).
offers guidance on the necessary steps that Syracuse and other cities should engage in to produce environmentally just planning outcomes.

I. ENVIRONMENTAL INEQUALITY AS A WAY OF LIFE

Along with other population centers in Upstate New York, Syracuse has had mixed fortunes in developing a post-industrial identity. Within this milieu are racial hierarchies that have persisted for decades. Consequently, the city’s development has stagnated, having been anchored by racialized economic segregation, population declines,5 high unemployment rates, and seemingly intractable poverty.6 The placement of I-81 through a predominantly African-American neighborhood just west of the city’s downtown permanently displaced hundreds of families in the 1960s while destroying local institutions in the city’s 15th Ward.7 This racially-based upheaval is the most enduring icon of the interstate’s legacy.8

Presently, as the highway’s conditions deteriorate, safety issues proliferate, and the costs associated with continual upkeep of the structure is prohibitive. Reoccurring maintenance will eventually become more costly than potential alternatives, a phenomenon that engineers and planners refer to as a project reaching “the end of its useful life.”9

The New York State Department of Transportation (“NYSDOT”) has considered three10 main alternatives for its 2019 DEIS.11 One option is a “do nothing” scenario, which would preserve the transportation status quo along with perpetual maintenance to address the highway’s deteriorating conditions.12 A second option is for the installation of a community grid.13 This option would replace the present interstate with a series of intersecting streets, installing a central boulevard that would be the epicenter of expanded

5 After a peak population of over 220,000 residents in 1950, the city has lost tens of thousands of residents in the following decades. See Syracuse, New York Population 2022, WORLD POPULATION REV., https://worldpopulationreview.com/us-cities/syracuse-ny-population (last visited Feb. 20, 2022).
8 DUCRE, supra note 4 at 43.
10 A fourth consideration, a tunnel option, was scrapped before the DEIS phase due to prohibitive costs. Natalie Rubio-Licht, Here’s Why the Viaduct, Tunnel Options Were Rejected for I-81, THE DAILY ORANGE (Apr. 23, 2019), https://dailycampus.com/2019/04/heres-viaduct-tunnel-options-rejected-81/.
12 Id. at 3.
13 Id. at 4.
live, work and play attractions. This design would reroute interstate traffic outside of the city. A third option is to remove and replace the current highway with an expanded onsite interstate, built to 21st Century standards.

II. A HISTORY OF RACIAL INEQUALITY IN CENTRAL NEW YORK

Environmental justice considers how structural racism and inequality inform environmental conditions and livelihoods. High-profile incidents of environmental injustice illuminate how environmental racism and other inequalities create dangerous conditions for marginalized communities. Hurricane Katrina, while devastating across the U.S. Gulf Coast, was particularly catastrophic for African-American residents of New Orleans’s Ninth Ward. The socioeconomic undergirding that allowed Michigan’s Flint Water Crisis to manifest, given the propensity for majority Black cities to be taken over by state-controlled emergency management, is another high-profile example. EJ claims also mandate inquiry of a range of other exposures and maladies, including the proximity of toxic facilities, the persistence of inequality centered on food access, and gender and energy systems. Additionally, environmental justice has implications for a range of quality of life considerations. These considerations contemplate who receives environmental benefits and amenities, such as bike lanes, green space, and access to environmental resources.

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15 Id.
16 Id.
18 See generally Chris Lewis, Does Michigan’s Emergency-Manager Law Disenfranchise Black Citizens?, THE ATLANTIC (May 9, 2013), https://www.theatlantic.com/politics/archive/2013/05/does-michigans-emergency-manager-law-disenfranchise-black-citizens/275639/ (noting that the socioeconomics undergirding that allowed Michigan’s Flint Water Crisis to manifest, given the propensity for the majority Black American city to be taken over by state control under that state’s emergency manager regime.).
Understanding and framing environmental injustice requires more than a mere analysis of singular episodes where inequality is manifest. The recognition of systemic inequality and the cumulative impacts from exposures to harm, along with barriers to obtaining environmental benefits that marginalized communities face, is requisite to examine environmental racism. While this analysis focuses on an interstate and its pending redevelopment, it also considers broader social and environmental inequality endemic to the region.

The initial and most systemic manifestation of racial marginalization in the region is the decimation of Central New York’s Native peoples. The Onondaga Nation, part of the six-member Haudenosaunee Confederacy, has survived successive assaults from the U.S. government. Neighbors across the US have been redlined with residents consequently subject to related housing discrimination. More recently was the placement of the Midland Avenue Regional (sewage) Treatment Facility on the city’s predominantly Black Southside. Also rampant on Syracuse’s Southside – and throughout the city -- is food apartheid. Lead poisoning is pervasive and Black children have a heightened risk of exposure in the city. The notorious Onondaga Lake, a Superfund site which at one point was classified as the most polluted lake in the United States, has disproportionately impacted the health of food-insecure households, which has had acute impacts on immigrant households.

These conditions are exacerbated by economic discrimination within the region. The city’s Black and Latino/a residents reside in the nation’s highest
racialized concentration of poverty neighborhoods. Economic isolation is undergirded by racialized barriers to entry in local labor markets, systematic exclusion from local labor unions is extensive and representative of broader workforce exclusion pervasive in the region.

The development of the interstate highway system has been particularly harmful to Black neighborhoods in cities across the nation. The path of least political resistance saw African American communities vulnerable to dissection and displacement for highway construction in cities including Orlando (I-4), Wilmington (I-95), Atlanta (I-20 and the Downtown Connector), and countless others. Residents of Syracuse’s 15th Ward faced similar conditions. In 1956, the Federal Aid Highway Act was passed, granting billions of dollars for the creation of interstate highways across the nation. In the process, the act most severely impacted Black neighborhoods, often adjacent to downtown business areas.

Systemic and institutional racism throughout the nation continues to exacerbate local racial conditions. The absence of 14th Amendment protections, coupled with policy such as heightened investment in non-Black suburban communities through subsidized construction and racist lending practices, laid the groundwork for economic and racial segregation in the 20th and 21st centuries America. Like a majority of American cities in the 1930s and 1940s, Syracuse’s neighborhoods were, for investment purposes, rated on the basis of neighborhood quality. This highly racialized process advanced the tactic subsequently known as “redlining.” These institutionalized systems were operationalized via de facto enactment of a nullification apparatus.
The work of local private sector bankers was advanced by urban planners and federal bureaucrats drafting federal monetary policy like the Servicemen’s Readjustment Act of 1944 (“G.I. Bill”) and mortgage lending practices that influenced local monetary and urban development policy and practice.\textsuperscript{37}

Not to be forgotten, nor forgiven, were realtors in the creation of racially segregated communities. In its 1924 Code of Ethics, the National Association of Real Estate Boards (“NAREB”) committed its members to “never be instrumental in introducing into a neighborhood a character of property or occupancy, members of any race or nationality, or any individuals whose presence will clearly be detrimental to property values in that neighborhood.”\textsuperscript{38}

Though I-81 would not literally rip through local neighborhoods until a few decades after NAREB and HOLCs work, they set up the figurative pathway for the decimation of the 15\textsuperscript{th} Ward.

\begin{section}{III. Evaluating Inequality: Methods & Approaches}

The research within this analysis is the culmination of over five years of study.\textsuperscript{39} This inquiry reviewed approximately 15,000 pages of the 2019 Draft Environmental Impact Statement (“DEIS”).\textsuperscript{40} This evaluation afforded heightened attention to the DEIS’s framing and evaluation of cumulative impacts and environmental justice and its overall treatment of environmental impacts.\textsuperscript{41} The analysis also involved numerous site visits to various locations within the project’s impacted areas.\textsuperscript{42} A range of techniques was used to understand the cumulative impacts of phenomena, including noise disturbances, threats to air quality issues, and easement compensation structures.\textsuperscript{43} This included reviewing public health data focusing on the prevalence of respiratory illness of residents who live in the footprint of I-81.\textsuperscript{44} The evaluation also investigated recreational activity within the project’s footprint and assessed

\begin{footnotes}
\footnotetext[37]{Ware, supra note 32 at 97.}
\footnotetext[38]{Code of Ethics, 1924 Convention of the Nat’l Ass’n of Real Est. Bds, art. 34.}
\footnotetext[39]{The analysis includes attending public meetings, including those in which I acted as a panelist, and community engagement functions with the public, document analysis and interaction with state and local government officials. Perhaps the most striking episode from a community meeting involved a matrix of travel times for an assortment of origin and destination points within the Syracuse metropolitan region; the travel times are absent locations within environmental justice communities including the community in which the meeting was being held. With destination and origin points containing an assortment of job centers and suburban communities, it is implied via the omission of sites within EJ communities that residents of EJ communities have nowhere to go. This coincided with Tables 5-2, 5-4, 5-26 and 5-49 from the DEIS. U.S. DEP’T OF TRANSP. & NEW YORK DEP’T OF TRANSP., I-81 VIADUCT PROJECT: DRAFT DESIGN REPORT & ENVIRONMENTAL IMPACT STATEMENT 5-11–5-149 (2021).}
\footnotetext[40]{Id. at 1-3.}
\footnotetext[41]{See id. at 6-77, 6-113.}
\footnotetext[42]{Id. at 1-1, 1-4.}
\footnotetext[43]{See id. at 6-275–6-276 (discussing noise disturbance analysis techniques).}
\footnotetext[44]{Id. at 6-235, 6-236.}
\end{footnotes}
school performance data at one of the three schools within the project’s affected area. Consultation duties led to public and community engagement, including the 2019 Lobby Day at the New York General Assembly, neighborhood functions and multiple meetings with the Onondaga Nation to discuss unique impacts that Native peoples may face as a consequence of the highways redevelopment.

IV. UNDERSTANDING CUMULATIVE IMPACTS & ENVIRONMENTAL IMPACT ANALYSIS

Interstates expose communities to environmental health hazards. This reality necessitates environmental impact assessments to gauge the extent of threats that these areas face. In determining the placement of interstates, local population densities and existing land use patterns should be considered. Highways also tend to limit non-auto modalities, including walking and biking, which should also factor into decision making. There are multiple regulatory thresholds that the Federal Highway Administration and NYSDOT must meet through the environmental review process, including adherence to the 1970 National Environmental Policy Act (“NEPA”). NEPA mandates environmental impact analysis in the form of a formal environmental impact statement for “actions that are likely to have a significant impact on the natural or built environment.” Federal guidelines, mandated under NEPA and proclaimed by the Council on Environmental Quality, require that comprehensive environmental impact analysis and cumulative impacts analysis be undertaken. The latter evaluates environmental impacts as a result of other impacts, either from the past, present or potential future ones, even those not directly related to the potential project.

There are no definitive guidelines for assessing the sum of cumulative impacts, nor could there be. Cumulative analysis mandates that so long as government entities consider impacts in a range of areas, including air quality,

45 Id. at 6-112.
46 Not directly related to this analysis, but integral to understanding EJ more holistically, one of the cited consequences according to the DEIS was the potential disruption of Native burial sites. U.S. DEP’T OF TRANSP. & NEW YORK DEP’T OF TRANSP., supra note 39 at E-4 app. at 9.
49 42 U.S.C. § 4332(c).
50 See COUNCIL ON ENVTL. QUALITY, CONSIDERING CUMULATIVE EFFECT UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT 1 (1997).
51 See id.
Due to the significant involvement of NYSDOT, there are statutory obligations under the New York State Environmental Quality Review Act (“SEQRA”). In addition to requirements for environmental impact assessment for state projects, SEQRA contains guidelines for when the state must act to identify and mitigate activity that has “significant” environmental impacts.

Per Executive Order (“EO”) 12898, federal projects that are reasonably expected to have environmental impacts are required to have an environmental impact analysis of affected areas, and address considerations and impacts pertaining to EJ communities. This EO mandates that federal agencies: (i) identify the adverse human health or environmental impacts of their actions on EJ communities and (ii) promote public participation and information access to EJ populations for related agency activity. Within these guidelines, the U.S. Department of Transportation is obligated to provide and promote (a) the full and fair participation by all potentially affected communities in the transportation decision-making process; (b) avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects; and (c) prevent the denial of, reduction in, or significant delay in the receipt of benefits. This language can be elusive in ensuring environmental justice, as the bar to completion compels that EJ considerations are acknowledged but does not mandate that EJ outcomes are requisite. While consideration may acknowledge disparities and inequality, its use can be cynically deployed. For example, a consultation with a distressed neighborhood which solicits public comment won’t lead to improved material outcomes nor disrupt systemic inequality if just outcomes aren’t an ultimate objective.

Mere interface with the public via public meetings and hearings is not evidence of a robust and authentic public engagement, nor is it indicative of procedural justice. While the former is a function of bureaucracy that gives deference to federal statutes on meeting requirements, it does not necessarily combat or overturn the racial marginalization and disenfranchisement needed to dismantle systemic discrimination. Nor does it ensure that residents will have faith that a system can deliver democratic, equitable, and safe outcomes.

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54 N.Y. COMP. CODES R. & REGS. tit. 6, § 617.1(c) (2019).
56 Id. at 7,632.
This analysis acknowledges the incompatibilities and inconsistencies between accepted environmental standards from a regulatory perspective and those thresholds that are necessary to promote human well-being. The gaps created by adhering to a regulatory standards approach for human health and safety, and a framework that promotes and protects livelihoods is not insignificant. This gulf is compounded when an assortment of overlapping vulnerabilities, such as food insecurity and lead-paint exposures, are coupled with socioeconomic conditions, such as poverty and poor access to quality healthcare that are not considered in concert.

V. INEQUALITY & ENVIRONMENTAL IMPACTS

This history of environmental racism, coupled with present conditions, demands a systematic approach to redevelopment centering on human health impacts disproportionately experienced by EJ communities. Given the magnitude of demolition and construction during redevelopment, a life cycle analysis approach is appropriate, which centers on quality-of-life concerns.58 The scope of the interstate redevelopment project must be broader than simply the start of demolition to the final ribbon-cutting. EJ (i) mandates framing decision making that acknowledges the history of displacement and disenfranchisement, (ii) work towards outcomes involving the amelioration of structural inequality and concentrated poverty while advocating sustainable livelihoods for all, and (iii) ultimately considers how the studied project will destabilize or perpetuate the above conditions. This has significant implications for Syracuse, particularly concerning communities adjacent to I-81 due to the prominence of legacy pollution.

A. Framing Environmental Racism

The impact that highways have on public health and the local environment is profoundly troubling. There are elevated health risks associated with living near heavy traffic roadways.59 Exposures are not limited to environmental threats related to heightened traffic, such as noise or particulates, but also include those related to road construction. A recent study illuminated the increased vulnerability of EJ communities to industrial and major transportation infrastructure sources, including exposure to petrochemicals linked to various cancers and cardiovascular disease.60 EJ communities are acutely threatened because the associations between race, income, and heightened

60 See id.
Traffic and congestion are central themes of the broader conflicts related to I-81’s redevelopment. An inordinate amount of attention has been focused on suburban commuters, travel times, and congestions, which largely neglects the disproportionate burdens and sacrifices borne by local African American residents. The commentary is ahistorical, as it fails to address a history of displacement. Further, it does not reflect problems like excessive noise and air pollution. Without a focus on those who do not have full entrée to the vibrant economic life experienced by other segments of the region, systemic barriers to equality will never be dismantled.

B. Human Health Impacts

There are potential construction-related threats to EJ communities with either a community grid or redeveloped interstate option. For example, staging areas under either plan are yet to be determined and ultimately will be identified by contractors. There needs to be extensive groundwork before the construction process begins to identify the most and least suitable areas for siting. Accordingly, protections must be afforded to communities such that no single neighborhood has an unacceptable overload of staging sites or otherwise serves as a de facto idling depot for the larger project. Advanced attention should also be given to the parking of private vehicles belonging to the project workforce, with preference given to off-site shuttle options that would further reduce the construction imprint in local areas. Additionally, disposal sites need to be pre-identified so that informed consent may be obtained.

The reconstruction of a viaduct will involve significantly more building demolition, twenty-four buildings, compared to four under the current community grid plan. Preexisting asbestos on properties has already been detected, along with the likelihood of older buildings being inundated with lead-


62 Here, “close proximity” means within 500m of roads designed to carry high volumes of traffic (i.e., 25,000 average annual daily vehicle trips). 23.7% of African Americans and 29.4% of Latino/a residents live within 500m of such roads, while only about 20% of the overall population does. The median income for populations living in close proximity to major roads is over $1,200 less than the population at large. Id.


64 See ANTHONY ARMSTRONG & MAKE COMMUNITIES, POVERTY & RACE RSCH. ACTION COUNS., DECONSTRUCTING SEGREGATION IN SYRACUSE? 18 (2018).

65 See id. at 4.
based paint. It’s vital that specific analysis on what protective measures will be taken along with clear public communication that assuages concerns about hazards dispersal is performed. Moreover, extensive hazardous waste and contaminants have been identified in the study area, presenting further environmental risks associated with demolition. Contractors are slated to take the lead on preparing a consequential soil management plan and hiring an environmental monitor to oversee the screening and management of contamination. For purposes of transparency, accountability, and oversight, it is in the public interest to have direct governmental oversight of activities involving hazardous waste.

C. Noise Disturbance as Public Nuisance

While it is readily acknowledged that indoor air pollutants are a significant contributor to respiratory disease, outdoor conditions factor significantly as well. Noise pollution disrupts life functions and has a host of negative non-auditory effects, including sleep disruption, elevated blood pressure, and heart rate acceleration. There are tens of millions of Americans affected by heightened noise exposure, with effects ranging from cardiovascular disease to hearing loss. In addition, construction sites and related activities are a predominant source of ambient noise that leads to noise annoyance. Chronic noise disturbance is also associated with other impairments, including deficits in cognitive development in children, reduced reading comprehension, and classroom behavior problems.

Both the viaduct and community grid options are expected to have adverse noise impacts for EJ communities. Noise disturbance is expected to be prevalent, even with the use of abatement technologies and techniques such as sound barriers, buffer zones, noise insulation in school buildings, and time and activity constraints. The DEIS recommends that hotel vouchers be granted to residents who will be impacted outside of the 7:00 am to 9:00 pm Monday through Friday period in which Syracuse’s noise ordinance allows for standard construction activity. While voucher policies seek to counteract

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66 U.S. DEP’T OF TRANSP. & N.Y. DEP’T OF TRANSP., supra note 39 at 6-518.
69 Id.
70 Rostam Golmohammadi et al., Noise Annoyance Due to Construction Worksites, 13 J. RSCH. HEALTH SCI. 201, 206 (2013).
72 U.S. DEP’T OF TRANSP. & NEW YORK DEP’T OF TRANSP., supra note 39 at 6-80–6-81.
73 Id. at 6-77, 6-87, 6-227.
the biophysical response to excessive noise, hotel vouchers come with concerns in a number of areas. Such a framework may create potential complications for school-aged children and working people due to the disruption of norms associated with completing schoolwork, job preparation, or simple impediments to evening relaxation. Additionally, there is no clarity on which hotels will be primary lodging sites, nor is there an associated transportation plan, the absence of which raises concerns about the proximity to livelihoods that displaced residents will have.

D. Air Quality Impacts on Livelihoods

Forecasts for both the viaduct and community grid have affirmed that regulatory thresholds for a host of contaminants, including cobalt, nitric oxide, volatile organic compounds, and fine particulate matter, will not be exceeded. Even so, the current prevalence of respiratory illness, particularly on the Southside of Syracuse, is alarming. Respiratory disease is pronounced amongst the city’s Black population. Additionally, citywide asthma rates are higher than the state average. Children in particular face exceptional harm from living in close proximity to high-traffic roads and freeways. This includes heightened rates of respiratory illness symptoms, increased hospitalizations associated with households in close proximity to heavy traffic and truck volume, and overall reduced lung function.

The consequences of threatened air quality have not only direct impacts, such as those threats to respiratory health, but also have side effects, including school absenteeism, missed workdays for caretaking adults, and heightened rates of hospitalizations. When considering attendance rates at local schools or income implications for hourly workers and those working in positions without sick leave, it is vital to make these connections. It stands to reason that the impacts on the local community will be significant. Given this reality, a comprehensive cumulative impact and EJ framing should defer to these realities and provide guidance on how residents, including medically

74 Id. at 6-210-11, 6-215-16.
76 N.Y. STATE DEP’T OF HEALTH, supra note 75 at 17, 20. Asthma is a lung disease, which “causes wheezing, breathlessness, chest tightness, and coughing . . .” Learn How to Control Asthma, CDC (July 1, 2021), https://www.cdc.gov/asthma/faqs.htm.
77 Bert Brunekeef et al., Air Pollution From Truck Traffic and Lung Function in Children Living Near Motorways, 8 EPIDEMIOLOGY 298, 301 (1997); Shao Lin et al., Childhood Asthma Hospitalization and Residential Exposure to State Route Traffic, 88 ENVTL. RSCH. 73, 79–80 (2000); Rob McConnell et al., Traffic, Susceptibility, and Childhood Asthma, 114 ENVTL. HEALTH PERSPS. 766, 769 (2006).
78 See N.Y. CIV. LIBERTIES UNION, BUILDING A BETTER FUTURE: THE STRUCTURAL RACISM BUILT INTO I-81, AND HOW TO TEAR IT DOWN 26 (2020).
fragile populations, those with preexisting respiratory illness, and youth populations, will be affected by construction-related activity.

E. Legacy Pollution: Inheriting Environmental Problems

Attention must also be given to fugitive dust and legacy pollution, which are the remnant hazards typically associated with past industrial or commercial activity.\textsuperscript{79} Road construction has been identified as a catalyst for fugitive dust that temporarily impacts ambient air quality.\textsuperscript{80} The dispersal of legacy pollutants is likely, given their accumulation over decades from activity associated with both I-81 and city street traffic.\textsuperscript{81} The DEIS addresses, to a degree, the repression and management of fugitive dust.\textsuperscript{82} However, the extent of that threat, along with the composition of the soil, legacy pollution and other threats, are largely unknown. Due to the permanence of hazard elimination, it is vital to conduct extensive surveying of relevant lands to have a more comprehensive understanding of potential mobilized threats, along with consequential remediation in the form of removal rather than capping. Capping, which is a containment approach, is not preferred as it does not permanently remove contaminants.\textsuperscript{83}

While the I-81 DEIS formulaically addresses cumulative impacts in respect to the acutely unequal conditions that exist within EJ communities, it does not adequately recognize the preponderance of burdens that these communities face. It does not make the connections between preexisting environmental conditions, public health and environmental exposures, and threats to contaminants on a scale that is commensurate with what will be the largest demolition and construction project that the region has seen in decades, and perhaps ever. In the absence of robust cumulative exposures analysis, the human body becomes a biochemistry lab. The risks and dangers for EJ communities are particularly concerning, given the inordinate risk imposed on marginalized populations.

F. The Built Environment

The fact that the only public schools within the project study area’s imprint are a part of the Syracuse City School District (“SCSD”) is indicative of the

\textsuperscript{79} Fugitive dust is made of small airborne particles called particular matter. The particles are small enough to enter the lungs human through nasal passages and cause significant health impacts. ALASKA DEP’T OF ENVT. CONSERVATION, FUGITIVE DUST FREQUENTLY ASKED QUESTIONS 1 (2011). Legacy pollutants are contaminants that remain in the environment long after they were originally introduced, and they were generally not thought to be harmful at that time. Primer: Legacy Pollutants, FRONTLINE PBS (Apr. 21, 2009), https://www.pbs.org/wgbh/pages/frontline/poisonedwaters/themes/legacy.html#:~:text=Legacy.

\textsuperscript{80} U.S. DEP’T OF TRANSP. & N.Y. STATE DEP’T TRANSP., supra note 39 at 4-2.

\textsuperscript{81} 42 U.S.C. § 7545 (2009).

\textsuperscript{82} U.S. DEP’T OF TRANSP. & N.Y. STATE DEP’T TRANSP., supra note 39 at 6-243 (2019).

\textsuperscript{83} U.S. EPA, A CITIZEN’S GUIDE TO CAPPING 2 (2012).
environmental justice stakes and the implications of large development projects that have disproportionate impacts on urban communities. SCSD has a significantly higher African American student population than the surrounding suburban school districts. Of the entire study area, over 45% of the 186 census blocks affected by the project are environmental justice blocks. That is, they are predominantly low-income communities of color. The Southwest and South study areas have median incomes of $19,645 and $33,223, respectively. Both are significantly poorer than the region, more broadly, with a median income of over $53,000.

The school-aged population in the aforementioned Southwest study area alone is nearly 5,000 residents. Given the vulnerability of adolescent bodies, heightened sensitivity needs to be given to cumulative health impacts on these populations. The DEIS proposes that neither redevelopment option is slated to have permanent cumulative or indirect impacts on local school systems. Notwithstanding this claim, the current plan for the community grid option places a roundabout directly adjacent to STEAM at Dr. King Elementary School. While roundabouts are ideal in many circumstances for their traffic calming capacity, the potential for a heightened number of cars making turns at a major thoroughfare is cause for concern. Though, undoubtedly, there would be professional personnel to guide traffic during school rush hours, it is necessary to consider the large number of activities that often occur at neighborhood schools outside of the standard school day. This includes before- and after-school programs, meetings, and public events. It is vital that this roundabout be sited at a location further removed from a school with high pedestrian traffic.

G. Land Acquisition and Displacement

Easements, or temporary property takings, create challenges that are disproportionately experienced by EJ communities. They typically call for monetary compensation paid to impacted property owners rather than renters. In

84 U.S. DEP’T OF TRANSP. & N.Y. STATE DEP’T TRANSP., supra note 39 at 6-7.
86 U.S. DEP’T OF TRANSP. & N.Y. STATE DEP’T TRANSP., supra note 39 at 6-68.
87 Id.
88 Id. at 6-53.
89 Id.
90 Id. at 6-51.
92 U.S. DEP’T OF TRANSP. & N.Y. STATE DEP’T TRANSP., supra note 39 at 6-40.
93 Id. at 6-48, 6-51.
one EJ study area alone, more than four out of five households are occupied by renters. Under standard easement compensation schemes, while these households’ quality of life and passageways may be disturbed all the same as their property-owning neighbors, renters will not be compensated. An EJ response requires policy that addresses this ownership and occupancy discrepancy.

The reconstruction of the viaduct option would seemingly leave a greater environmental footprint on the city, due to the demolition of more property and its continued emphasis on the automobile as the preferred method of transport through the urban core. Still, it is important to keep an eye on the bigger picture involving land use, development patterns, and housing trends. Neither a community grid nor a redeveloped interstate guarantees environmental, racial, economic, or social justice. It is critical to acknowledge current settlement patterns in nearby areas and the recent proliferation of luxury student housing, coupled with systemic racism and inequality that informs the city’s dubious national leadership in structural inequality and concentrated poverty. Thus, to counteract the potential for gentrification, protections and restorative mechanisms that target African Americans and other affected groups must be in place prior to redevelopment to halt the potential for displacement.

H. Recreation and Impacts on Community Amenities

Wilson Park is perhaps the most aesthetically jarring feature of environmental inequality in Central New York. It serves as the onsite recreation area for residents and includes a playground, swimming pool, basketball courts, and open green space along with a community center, all located in the shadow of the highway. Wilson Park sits in the central portion of the most eastern edge of Pioneer Homes, one of the nation’s oldest public housing complexes. The park’s basketball courts, where it is common to see dozens of players from mid-Spring to Fall, lie virtually under the interstate. Both the interstate replacement and community grid options call for only a portion of the 2.1 acre park to close. The optics of a functioning public park operating adjacent to a $2 billion construction project is not only unjust, but also

94 Id. at 6-65.
98 WILSON PARK, supra note 96.
represents a technocratic failure to respect the quality of life concerns of city residents.

Down the road from the park, positioned directly west of the viaduct, is the neighborhood school, STEAM at Dr. King Elementary School, one of three SCSD schools located in the study area. It is important to view demolition, construction, and redevelopment phases within the context of SCSD’s transportation policy for student bussing. Bussing policy requires that students live more than 1.5 miles from a school to be eligible for services. And, under general guidance, bus stops can be up to 0.3 miles from a student’s home. In spite of its immediate proximity to the interstate’s redevelopment, the DEIS lacks adequate guidance on how bussing and pedestrian traffic, along with related safety concerns, will be affected due to construction in the area. Additionally, clearer analysis of how noise disturbances may impact routine school-related activities, including studying and completing homework in affected neighborhoods outside of school hours, is absent.

While not racially segregated in the classic sense, Dr. King’s student body is far from integrated. According to New York State data, during the 2017-2018 school year, of its approximately 563 students, 81% were Black/African American, 7% were Hispanic or Latino/a, 4.3% White, 0.4% Asian, 0.4% Native American, and 6.7% multiracial. Due to underperformance on statewide assessments, the State’s Education Department placed it, along with several other SCSD schools, in receivership status, making it vulnerable to outside takeover. Also important to consider is the pervasive poverty within the system. Food insecurity is so prevalent that all students are eligible for daily free breakfast and lunch daily due to a community exemption, based on the rampancy of low-income households. A focus on Dr. King’s students is vital in framing the larger implications of I-81’s redevelopment. Because it is a neighborhood school, its more than five hundred students are uniquely affected by the mega-transportation project as most of their day, whether at home or at school, takes place within a couple of miles of the

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100 The Institute of Technology at Syracuse Central and Dr. Weeks Elementary School are the other two public schools. The Central Academy at Pompei, a private school, is also located within the project study area and is inside the City of Syracuse. U.S. DEP’T OF TRANSP. & N.Y. STATE DEP’T TRANSP., supra note 39 at 6-25 (2021).


102 Id.


existing viaduct. Moreover, school-age students and their developing bodies are at heightened vulnerability due to a “more permeable blood-brain barrier, less effective filtration in nasal passages, highly permeable skin, and vital organs [that] are still developing” to a number of environmental contaminants that can profoundly impact body systems. Therefore, it is imperative to understand this proximity in light of the aforementioned air quality and health impacts.

The potential for either a replacement viaduct or community grid to inform settlement patterns requires significant forecasting. Conceivably, the mixed-use housing and commercial development associated with either project could be a boon for live-work-play communities. The consequence of which would be increased racial diversity in the neighborhoods that are overwhelmingly African American. Nevertheless, as the DEIS reports, most development in the area is slated to be one and two-bedroom apartments. Its likely occupants are projected to be college students and others affiliated with local higher education institutions rather than local families. Therefore, the likelihood of substantially ameliorating school segregation is low, especially short of extraordinary measures that operate outside of the neighborhood school’s model. While the implications for how these settlement patterns could lead to broader trends in the overall housing stock are beyond the scope of this analysis, considering associated trends is not. Prominent local universities have signed on in support of the community grid option. When reconciled with SCSD’s graduation rate, which in 2018 was 58% versus 80% statewide, thousands of school-aged youth will not be prepared or in a position to attend the universities that stand to be beneficiaries of redevelopment.

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107 Children Are Not Little Adults!, supra note 91.


109 N.Y. CIV. LIBERTIES UNION, supra note 78 at 17–18.


CONCLUSION

Either a viaduct replacement or community grid may ultimately meet statutory cumulative impacts obligations and operate within regulatory boundaries related to EJ impacts, as mandated by law, Executive Order 12898, US Department of Transportation Order 5610.2(a) and the US DOT’s Environmental Justice Strategy. This framework does not ensure the well-being of public health. Residents with preexisting health issues, along with youth and elderly populations, have all occupied the area for decades since I-81’s initial construction with scarce federal or state effort to successfully ameliorate repressive socioeconomic conditions. Notwithstanding compliance with federal statutes that mandate EJ, the prevalent federal regulatory framework is inadequate for assessing racial and environmental inequality in Syracuse and elsewhere. A restorative justice framework and praxis is needed.

Because EJ communities within Syracuse have long been exposed to the impacts of development associated with the decimation of the 15th Ward, special provisions are imperative. Redevelopment predicated on EJ necessitates a restorative justice framework beyond statutory compliance with federal laws. This framework needs to address quality of life concerns, including economic inequality, exposure to environmental harm, short and long-term relocation, and gentrification. Community protections and benefits should be negotiated between governing bodies, residents, and neighborhoods. These agreements must ultimately be anchored in community-driven demands and environmental justice considerations in comprehensive development planning and zoning activity. Along with mindfulness of preexisting inequality, these agreements may include workforce development strategies, housing and economic agendas that combat the legacy of HOLC, and other entities that have perpetuated neighborhood destabilization, including progressive training and hiring policies and practices. Community benefits may also be linked to broader EJ-related activity across the region, such as food insecurity, soil remediation, lead poisoning, home remediation, healthcare access, and public education stratagem.

In addition to federal and state environmental justice policy, there is substantial room for local environmental policy to be orientated towards protecting marginalized residents, including EJ zoning and land use policy and public health-driven planning. Also, within this purview may be a realignment of local transportation networks, which would be centered on multi-modal transportation and the promotion of non-carbon intensive modes of transport.

113 Id.
Not only will removing cars from the streetscape have a potential impact on greenhouse gas emissions in the form of reductions, but local air quality will consequently improve.

Many local institutions have historically benefited from the dissolution of the 15th Ward, the installation of the viaduct, and the presence of other locally unwanted land uses. Presently, several community institutions, including local universities, have come out in support of the community grid and will have substantial stakes in the redevelopment process. This needs to be reconciled with the hiring practices and student enrollments at these institutions, which are functionally the antithesis of the SCSD demographics mentioned above. Given the potential for redevelopment to cater to those associated with these institutions, it’s not misguided to anticipate a redevelopment that is not centered on the politics of racial justice.

Ultimately, any redevelopment framework must be restorative with a focus on remediation of land that has been contaminated from decades of adjacency to the interstate and made further vulnerable by other locally unwanted land uses. Without a comprehensive analysis of the soil, potential threats are speculative, so it is vital that extensive analysis precedes this process. The inequitable and structural forces in which EJ communities exist are not the consequence of singular, one-off decisions. Those conditions are representative of structural racism and inequality that have heightened exposures and negative outcomes associated with environmental injustice, including school underperformance, food insecurity, respiratory disease, lead exposure, interstate siting, racial isolation, and concentrated poverty. This redevelopment project must recognize these converging forces and act in concert with other local, state, and nongovernmental plans to shape an ensemble of responses to these problems. Remediation efforts must remove threats, not manage them.

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115 Of SCSD’s over 18,300 students, Black and Latinos are 48% and 14%, respectively, of the district’s population. By contrast, the two groups comprise only 7% (Blacks) and 8.6% (Latinos) of all students at Syracuse University, and its population of more than 22,800 students. SYRACUSE UNIV., OFFICE OF INSTITUTIONAL RESEARCH, STUDENT ENROLLMENT BY CAREER AND ETHNICITY: FALL 2019 CENSUS (2019); Syracuse City School District Enrollment (2020-2021), N.Y. STATE EDUC., https://data.nysed.gov/enrollment.php?year=2021&institd=800000040902 (last visited Apr. 17, 2022).
